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10/622,222	07/18/2003	Andrew D. Stadler	15814.3	4669

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EXAMINER	
NEURAUTER, GEORGE C	

ART UNIT	PAPER NUMBER
2143	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/622,222	STADLER ET AL.	
	Examiner	Art Unit	
	George C. Neurauter, Jr.	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) *28-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/25/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-36 are currently presented for examination.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-27, drawn to compression and decompression methods within communication devices and a communication device, classified in class 709, subclass 247.

II. Claims 28-36, drawn to a method of monitoring SIP data streams in a network, classified in class 709, subclass 224.

Inventions I and II are directed to related processes. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed used for different purposes since invention I is used to compress and decompress SIP data for communication between a communication device and another device and invention II is used to monitor and copy a SIP data stream

and use the data within a network information gathering device. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Burns Israelsen on 29 August 2007 a provisional election was made without traverse to prosecute invention I, claims 1-27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 28-36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must

be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 25 May 2004 was filed before the mailing of a first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 10-21, and 23-27 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication 2004/0162032 A1 to Li et al.

Regarding claims 1 and 13, Li disclosed in a communication device (referred to within Li as a "mobile station" or a "SIP proxy server") that uses session initiation protocol (SIP) to

transmit data used to set up communication with another device (also a "mobile device" or "SIP proxy server"), a method of compressing and decompressing the data, comprising:

at a serializer in the communication device, receiving a SIP data structure that represents a SIP message; generating a tokenized message that includes a list of tokens representing semantic elements of the SIP data structure and transmitting the tokenized message from the communication device to the other device; (see at least paragraph 0024, specifically "a mobile station...generates a SIP/SDP message, compresses the message and transmits the compressed message...to an SIP proxy server"; see also paragraph 0025, specifically "...the compression of a SIP/SDP message is performed by parsing the message into pieces, wherein each piece comprises a static component and a variable component...The static component is one of a finite set of possible static components and can be replaced by a token that identifies the static component")

and, at another device, receiving a tokenized message that includes a list of tokens representing semantic elements of a SIP data structure generated by the other device, wherein the SIP data structure generated by the other device represents a SIP message; decoding the tokenized message by identifying the semantic elements represented, by the tokenized message, thereby

obtaining a decoded SIP data structure; and using the decoded SIP data structure to establish or continue a communication session between the communication device and the other device. (see at least paragraph 0025, specifically "The SIP proxy server is configured to decompress the compressed SIP/SDP message and then use the uncompressed SIP/SDP message to set up the voice-over-IP call in the normal manner...") (also note that both the communication device and the other device may also compress and decompress the data; see paragraphs 0024 and 0043)

Regarding claims 2 and 15, Li disclosed the method as recited in claims 1 and 13, wherein generating a tokenized message and decoding the tokenized message is performed without generating a plaintext message that represents the SIP message. (see at least paragraph 0035 and 0042)

Regarding claims 3 and 16, Li disclosed the method as recited in claims 1 and 13, wherein at least some of the tokens included in the tokenized message are selected based on knowledge of the semantic meaning of the SIP data structure and decoding the tokenized message comprises identifying semantic elements that correspond to tokens of the tokenized message using knowledge of the semantic meaning of SIP data structures. (see at least paragraphs 0054-0060)

Regarding claims 4 and 17, Li disclosed the method as recited in claims 1 and 13, wherein generating a tokenized message and decoding the tokenized message is performed in a stateless manner that does not require knowledge of any previous SIP messages that have been generated by the communication device and the other device. (see at least paragraph 0032, specifically regarding the use of "predetermined formats")

Regarding claims 5 and 18, Li disclosed the method as recited in claims 1 and 13, wherein at least some of the tokens included in the tokenized message represent semantic elements that are common to substantially any legal SIP message. (see at least paragraphs 0054-0060)

Regarding claims 6-7 and 19-20, Li disclosed the method as recited in claims 5 and 18, wherein other tokens included in the tokenized message are selected to represent strings in the SIP data structure and at least one of a telephone number and an IP address.

Regarding claims 8 and 21, Li disclosed the method as recited in claims 5 and 18, wherein generating the tokenized message is performed using at least one static dictionary located at the communication device. (see at least paragraph 0032)

Regarding claim 10, Li disclosed the method as recited in claim 1, wherein generating the tokenized message is performed using a tokenized SIP serializer that also serializes the data for transmission to the other device. (see at least paragraphs 0039 and 0040)

Regarding claim 11, Li disclosed the method as recited in claim 1, wherein:

the serializer is a conventional SIP serializer that generates a plaintext message representing the SIP message; and generating the tokenized message is performed using a tokenizer that operates with the conventional SIP serializer and generates the tokenized message from the plaintext message. (see at least paragraph 0024, specifically "a mobile station...generates a SIP/SDP message, compresses the message..."; see also paragraph 0025, specifically "...the compression of a SIP/SDP message is performed by parsing the message into pieces, wherein each piece comprises a static component and a variable component...The static component is one of a finite set of possible static components and can be replaced by a token that identifies the static component") (also see paragraph 0006, specifically "The SIP/SDP message...is ASCII-encoded...")

Regarding claim 12, Li disclosed the method as recited in claim 1, wherein transmitting the tokenized message is performed

such that the other device can decode the tokenized message to obtain the SIP message, thereby enabling a communication session to be established between the communication device and the other device. (see at least paragraph 0024)

Regarding claim 23, Li disclosed the method as recited in claim 13, wherein decoding the tokenized message is performed using a tokenized SIP parser that also parses the SIP message. (see at least paragraph 0042)

Regarding claim 24, Li disclosed the method as recited in claim 13, wherein decoding the tokenized message comprises:

using a detokenizer that receives the tokenized message and generates a plaintext message representing the SIP message; and using a conventional SIP parser to parse the plaintext message to obtain the SIP data structure. (see at least paragraph 0042)

Regarding claim 25, Li disclosed a communication device (a "mobile device" or "SIP proxy server") for handling session initiation protocol (SIP) transactions in a network, including generating SIP data structures, the communication device comprising:

an application that generates SIP data structures; (see at least paragraph 0024, specifically "a mobile station...generates a SIP/SDP message...")

a tokenized serializer in the communication device configured to receive SIP data structures that represent outgoing SIP messages and to generate outgoing tokenized messages that include lists of tokens representing semantic elements of the SIP data structures (see at least paragraph 0024, specifically "a mobile station...generates a SIP/SDP message, compresses the message and transmits the compressed message...to an SIP proxy server"; see also paragraph 002, specifically "the compression of a SIP/SDP message is performed by parsing the message into pieces, wherein each piece comprises a static component and a variable component...The static component is one of a finite set of possible static components and can be replaced by a token that identifies the static component"); and

a tokenized parser configured to receive, incoming tokenized messages that includes lists of tokens representing semantic elements of SIP data structures, generated by another device and to decode the incoming tokenized messages by identifying the semantic elements represented by the tokenized message. (see at least paragraph 0025, specifically "The SIP proxy server is configured to decompress the compressed SIP/SDP message and then use the uncompressed SIP/SDP message to set up

the voice-over-IP call in the normal manner...") (see also paragraphs 0024 and 0043)

Regarding claim 26, Li disclosed the communication device of claim 25, wherein the tokenized serializer operates without generating plaintext messages that represent the outgoing SIP messages. (see at least paragraph 0035 and 0042)

Regarding claim 27, Li disclosed the communication device of claim 25, wherein the tokenized parser generates decoded SIP data structures without generating plaintext messages representing the incoming SIP messages. (see at least paragraph 0035 and 0042)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li in view of US Patent 7,143,191 to Chuah et al.

Regarding claim 9 and 22, Li disclosed the method as recited in claim 8 and 21.

Li did not expressly disclose generating the tokenized message is further performed using a dynamic message dictionary that includes strings identified in the SIP data structure and

the method further comprises transmitting the dynamic message dictionary with the tokenized message from the communication device to the other device. Li also did not disclose decoding the tokenized message is further performed using a dynamic message dictionary that includes strings identified in the SIP message and the method further comprises receiving the dynamic message dictionary from the other device with the tokenized message.

However, Chuah does disclose these limitations in the context of sending and receiving compressed SIP messages (column 3, line 48-column 4, line 18). Chuah discloses that using a dynamic message dictionary dynamically increases the compression ratio as more messages are received (see column 4, lines 8-11). In view of this advantage and that the use of such a dynamic dictionary is done in conjunction with the compression and decompression of SIP messages, one of ordinary skill in the art would have been motivated to combine the teachings of the references in order to achieve the claimed invention. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art since combining the teachings of the references would have been within the level of those of ordinary skill within the art of SIP messaging.

Conclusion

It is noted that the column, line, and/or page number citations used in the prior art references as applied by the Examiner to the claimed invention are for the convenience of the Applicant to represent the relevant teachings of the prior art. The prior art references may contain further teachings and/or suggestions that may further distinguish the citations applied to the claims, therefore, the Applicant should consider the entirety of these prior art references during the process of responding to this Office Action. It is further noted that any alternative and nonpreferred embodiments as taught and/or suggested within the prior art references also constitute prior art and the prior art references may be relied upon for all the teachings would have reasonably suggested to one of ordinary skill in the art. See MPEP 2123.

The prior art listed in the PTO-892 form included with this Office Action disclose methods, systems, and apparatus similar to those claimed and recited in the specification. The Examiner has cited these references to evidence the level and/or knowledge of one of ordinary skill in the art at the time the invention was made, to provide support for universal facts and the technical reasoning for the rejections made in this Office Action including the Examiner's broadest reasonable

interpretation of the claims as required by MPEP 2111 and to evidence the plain meaning of any terms not defined in the specification that are interpreted by the Examiner in accordance with MPEP 2111.01. The Applicant should consider these cited references when preparing a response to this Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is 571-272-3918. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George C. Neurauter, Jr.
Patent Examiner